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U1S S2424

(56) Documents Cited:  
DE 019848760 A JP 100126867 A  
JP 090319515 A JP 2001166876 A  
JP 2000218960 A US 6211450 A

(58) Field of Search:  
UK CL (Edition V ) B6F, F2Y  
INT CL<sup>7</sup> B41J, G06F, H04M  
Other: Online: EPODOC JAPIO WPI

(54) Abstract Title: Antibacterial disposable cover for a computer keyboard and mouse

(57) An antibacterial disposable cover for a computer keyboard (4) and mouse (6) is secured to the keyboard (4) or mouse (6) with a low tack adhesive (2) applied to the mating surface of the disposable cover. This allows the cover to be easily removed without any residue remaining on the mating surface of the keyboard (4) or mouse (6). The covers can be simply removed and replaced by another user or at will. The cover provides protection for the keyboard/mouse from dirt, dust, grime and chemical/liquid contamination. The cover provides protection for the user from bacteria as a results of cross contamination.

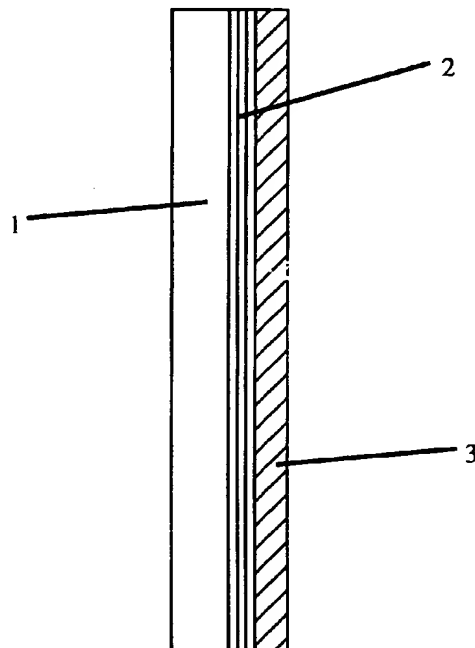


Fig 1

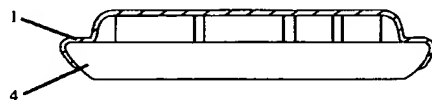


Fig 5

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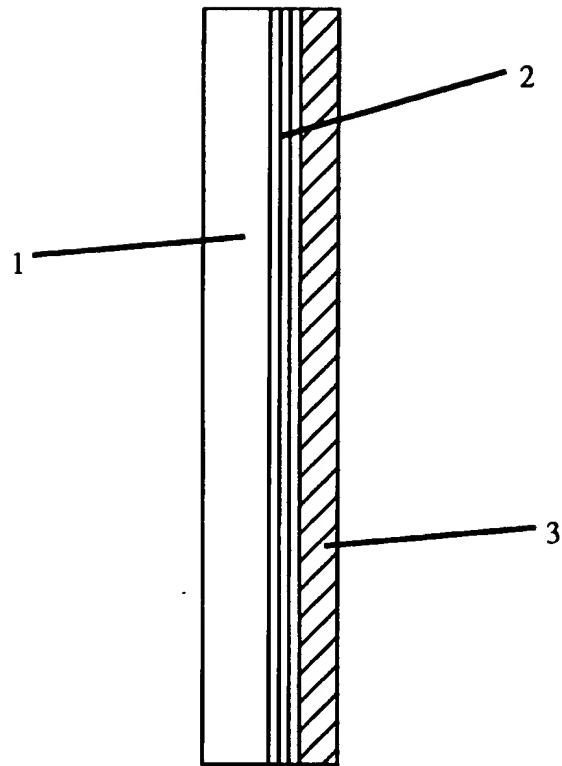


Fig 1

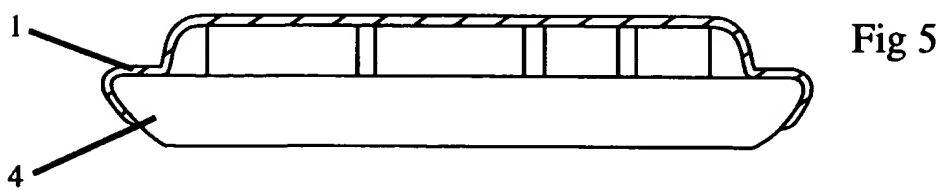
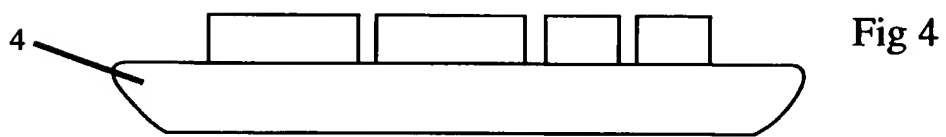
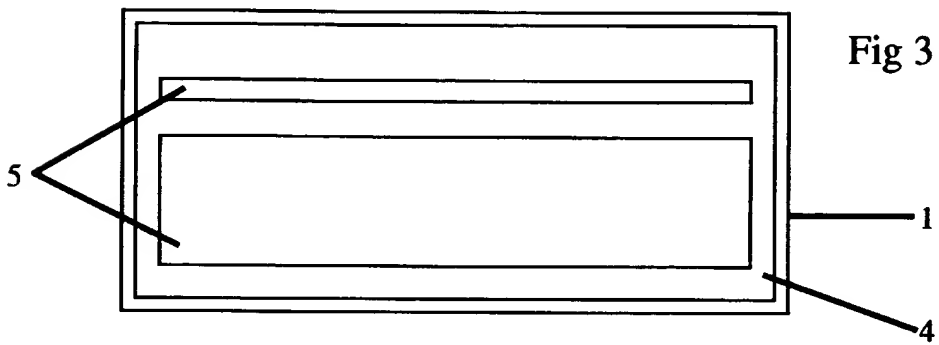
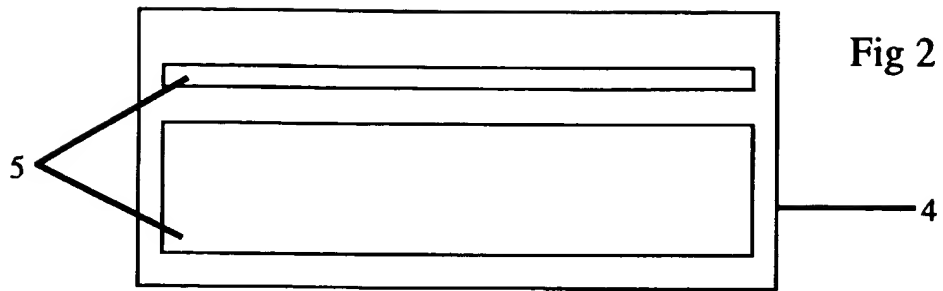


Fig 6

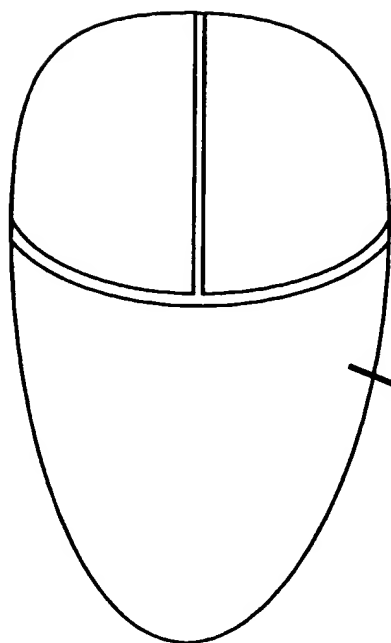


Fig 7

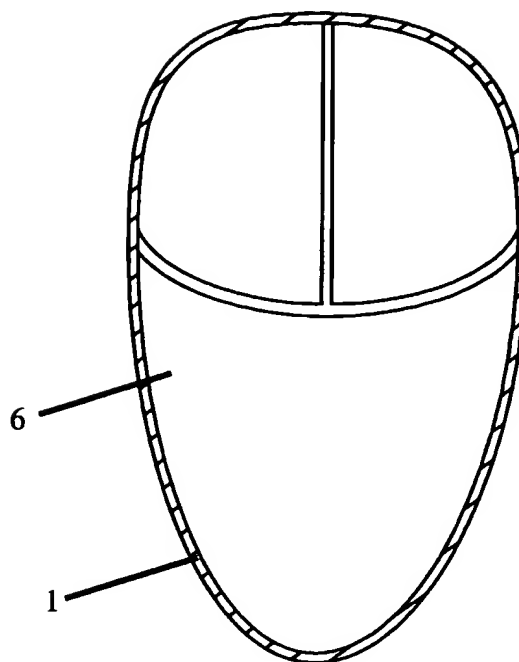
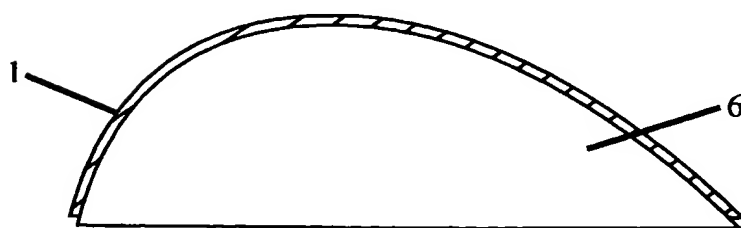


Fig 8



Fig 9



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## **Drawing Key**

**1 Flexible antibacterial plastic film.**

**2 Adhesive.**

**3 Backing material.**

**4 Keyboard.**

**5 Keyboard Keys.**

**6 Mouse.**

## **Antibacterial Disposable Covers for a Computer Keyboard and Mouse**

Computer keyboards are part of our everyday lives. We use these peripherals without a second thought as to what lies on their surfaces. Some of us only clean our keyboard when it appears dirty, but most of the time what appears clean is not. With the advent of the Internet café and shared workstations it is possible to transfer bacteria lurking on our hands to other users. Some of these bacteria can cause us to become ill, some are harmless.

The antibacterial disposable covers aim to:

1. Protect the keyboard or mouse from dirt, grime, grease, dust, chemical or liquid contamination.
2. Protect the user from cross contamination as a result of directly touching a surface contaminated by a previous user.

The disposable covers are intended to remain in place whilst the keyboard is being used.

This invention relates to an antibacterial disposable cover for a keyboard or mouse to keep these peripherals in a sanitary working condition. According to the present invention there is provided a flexible transparent film with a low tack adhesive applied to its mating surface and a suitable backing release material to protect the adhesive until the cover is in use. The nature of this low tack adhesive is such that:

1. It permits the cover to be easily peeled off or removed from the peripheral.
2. It does not leave any residue behind on the peripheral surface when the cover is removed.

A specific embodiment will now be described by way of examples with reference to the drawings in which;

Figure 1 shows a section through the cover.

Figure 2 shows a plan view of a keyboard before the cover is applied.

Figure 3 shows a plan view of the keyboard with the cover installed.

Figure 4 shows a section through the keyboard without the cover.

Figure 5 shows a section through the cover with the cover installed.

Figure 6 shows a plan view of a mouse without the cover.

Figure 7 shows a plan view of the mouse with the cover installed.

Figure 8 shows a section through a mouse without the cover.

Figure 9 shows a section through a mouse with the cover installed.

Referring to the drawing figure 1 the cover comprises of a flexible plastic film material, with a low tack adhesive on its mating surface and a suitable backing material.

When the cover is required for use the backing material is peeled off and discarded, revealing the low tack adhesive surface. This low tack adhesive surface is then brought into contact with the peripheral and allowed to drape freely over the entire upper surface and the sides of the peripheral as can be seen in Figures 3, 5, 7 and 9.

To remove the cover it is simply peeled off the surface of the peripheral and discarded.

## **Claims**

1. An antibacterial disposable cover comprising of a flexible plastic film with a low tack adhesive applied to its mating surface, with a suitable removable backing material. The low tack adhesive being employed as a simple method of attaching the cover to the peripheral and upon removal does not leave any residue. The plastic film being employed is anti-bacterial. The disposable cover is of predetermined size to protect the upper surface of the keyboard or mouse from contamination. The plastic film preventing contact between the operator and the peripheral.
2. A disposable cover as claimed in 1 where said plastic film attaches to the sides of the peripheral.
3. A disposable cover as claimed in 1 where said plastic film attaches to the upper surface of the peripheral.
4. A disposable cover as claimed in 1 where said plastic film envelopes the keyboard.
5. A disposable cover as claimed in 1 utilising a flexible plastic film with a low tack adhesive applied to its surface to be used for protection of a keyboard or mouse.
6. A package of antibacterial disposable covers each said cover comprising of a flexible plastic film with a low tack adhesive applied to its mating surface, with a suitable removable backing material. The low tack adhesive being employed as a simple method of attaching the cover to the peripheral and upon removal does not leave any residue. The plastic film being employed is anti-bacterial. The



disposable cover is of predetermined size to protect the upper surface of the keyboard or mouse from contamination. The plastic film preventing contact between the operator and the peripheral.

7. The package of claim 6 wherein said plastic film attaches to the sides of the peripheral.
8. The package of claim 6 wherein said plastic film attaches to the upper surface of the peripheral.
9. The package of claim 6 wherein said plastic film envelopes the keyboard.
10. The package of claim 6 wherein said plastic film has a low tack adhesive applied to its surface to be used for protection of a keyboard or mouse.
11. A roll of antibacterial disposable covers each said cover comprising of a flexible plastic film with a low tack adhesive applied to its mating surface, with a suitable removable backing material. The low tack adhesive being employed as a simple method of attaching the cover to the peripheral and upon removal does not leave any residue. The plastic film being employed is anti-bacterial. The disposable cover is of predetermined size to protect the upper surface of the keyboard or mouse from contamination. The plastic film preventing contact between the operator and the peripheral.
12. The roll of claim 11 wherein said plastic film attaches to the sides of the peripheral.
13. The roll of claim 11 wherein said plastic film attaches to the upper surface of the peripheral.
14. The roll of claim 11 wherein said plastic film envelopes the keyboard.
15. The roll of claim 11 wherein said plastic film has a low tack adhesive applied to its surface to be used for protection of a keyboard or mouse.



INVESTOR IN PEOPLE

Application No: GB 0221787.5  
Claims searched: 1-15

Examiner: Marc Collins  
Date of search: 17 December 2003

## Patents Act 1977 : Search Report under Section 17

### Documents considered to be relevant:

Category	Relevant to claims	Identity of document and passage or figure of particular relevance
X	1-15	JP 090319515 A (TAKAHASHI) 12.12.97 See whole document especially figures 1 & 2, PAJ abstract and WPI Abstract Accession No. 1998-091760 [09], and adhesive agent 3.
X	1-15	JP 2001166876 A (HAYASHI ZOEN KK) 22.06.01 See whole document especially figures 1 & 2, PAJ abstract and WPI Abstract Accession No. 2002-117123 [16].
X	1-15	US 6211450 B1 (ISHIDA) See whole document especially figure 2 and abstract.
A	-	JP 2000218960 A (DAINIPPON PRINTING) 08.08.00 See whole document especially PAJ abstract and WPI Abstract Accession No. 2000-554407 [51].
A	-	DE 19848760 A1 (DEUT TELEKOM) 27.04.00 See whole document especially WPI Abstract Accession No. 2000-340517 [30].
A	-	JP 100126867 A (NEC HOME ELECTRONICS) 15.05.98 See whole document especially WPI Abstract Accession No. 1998-340276 [30].

### Categories:

X Document indicating lack of novelty or inventive step	A Document indicating technological background and/or state of the art
Y Document indicating lack of inventive step if combined with one or more other documents of same category	P Document published on or after the declared priority date but before the filing date of this invention
& Member of the same patent family	E Patent document published on or after, but with priority date earlier than, the filing date of this application

### Field of Search:

Search of GB, EP, WO & US patent documents classified in the following areas of the UKC<sup>v</sup>:

B6F; F2Y

Worldwide search of patent documents classified in the following areas of the IPC<sup>7</sup>:



**Application No:** GB 0221787.5  
**Claims searched:** 1-15

**Examiner:** Marc Collins  
**Date of search:** 17 December 2003

B41J; G06F; H04M

The following online and other databases have been used in the preparation of this search report:

EPODOC, JAPIO, WPI